Syllabus

General Science IX **Maximum Marks: 75**

General Information

Paper of General Science IX consists of THREE Sections.

Section 'A': It consists of **15 Multiple Choice Questions (MCQs)** and **ALL** MCQs are to be answered. Each MCQ carries **1 mark.** The total marks for this section are **15.**

Section 'B': It consists of **10 Short-Answer Questions (SAQs)** out of which **6 (Six)** questions are to be answered. Each SAQ carries **5 marks.** The total marks for this section are **30.**

Section 'C': It consists of **5 Detailed-Answer Questions (DAQs)** out of which **3 (Three)** questions are to be answered. Each DAQ carries **10 Marks.** The total marks for this section are **30.**

Subject: General Science **Class: IX**

Theme		**Distribution of Questions**		
		Multiple Choice Questions	**Short Answer Questions**	**Detailed Answer Questions**
History and Nature of Science	**Topics**	**MCQs 0-4**	**SAQs 0-3**	**DAQs 0-2**
	-Definition of science -Impact of science on quality of life			

	-Contribution of some eminent Muslim scientists (Jabir bin Hayyan, Muhammad bin Zikriya Al–Razi, Ibn-al-Haitham, Al-Bairuni, and Bu Ali Sina) to science -Specific changes in science that have affected society -Specific cultural and societal issues that promote or hinder scientific advancement -Differentiation between pure and applied science -How Islam supports the acquisition of scientific knowledge -Branches of science -Relationship between different branches of science -Limitations of science			
Chemistry and Life	**Topics**	**(MCQs) 0-5**	**(SAQs) 0-4**	**(DAQs) 0-2**
	-Chemical composition of common materials such as plastic, polyester, nylon, polythene, rubber, glass, sugar, table salt, washing powder, etc. -Physical and chemical properties of elements -Physical and chemical properties of the compound -Potential uses and associated risks of different elements and compounds (e.g. hydrogen vs helium in balloons, copper vs aluminum in wiring, copper vs lead in plumbing, water vs alcohol/mercury in thermometers, petrol vs diesel in automobiles) -Impact of chemical products (aerosol, CFCs, Fertilizers, pesticides) on our lives and environment -Chemical changes in the events that we encounter daily (burning, rusting, fermentation, and decaying) -Recycling of elements and compounds (Cu, Fe, Al, plastic, glass, and rubber) -Benefits of recycling of elements and compounds			
Health, Diseases, and Prevention	**Topics**	**(MCQs) 0-4**	**(SAQs) 0-3**	**(DAQs) 0-2**
	-Relationship among dietary intake, eating behaviors, physical activity, and emotional health -Cleanliness and its importance for health -Composition of blood -Functions of blood			

	-Causes and effects of important blood diseases like leukemia, hemophilia, and anemia -Viral, bacterial, fungal and parasitic diseases: Viral: smallpox, polio, measles, and hepatitis Bacterial: Tuberculosis, whooping cough, diphtheria, tetanus, typhoid and cholera Fungal: Ringworm Parasitic: Malaria, threadworm, Ascaris -Causes, signs, symptoms, prevention, and treatment of mentioned viral, bacterial, fungal, and parasitic diseases -Risk factors of Stroke: Obesity, high-fat diet, and smoking -First aid for dog bites, snake bites, and insect bites -Role of artificial respiration as a first aid			
Population and Environment	**Topics**	**(MCQs) 0-2**	**(SAQs) 0-2**	**(DAQs) 0-2**
	-Assessment of size and rate of growth of human population determined by birth rate, death rate, immigration, emigration, and urbanization in Pakistan -Impact of human population growth on the environment -Relationship between overpopulation and sustainable development -Human population growth in Pakistan's neighboring countries			
Energy Sources	**Topics**	**(MCQs) 0-4**	**(SAQs) 0-3**	**(DAQs) 0-2**
	-Energy sources: fossil fuels, hydrogen as fuels, nuclear energy, hydel, wind and solar energy -Conventional and non-conventional energy sources -Renewable and non-renewable energy sources -Measurement of energy (natural gas and electricity) -Thermal pollution, fossil pollution, nuclear pollution and fuel hazards -Energy consumption and conservation -Ways of conservation and effective utilization of the available energy sources in Pakistan -Remedial measures to overcome pollution related to the use of energy			

Model Paper

General Science IX

SECTION 'A' **Total Marks: 15**

(Multiple Choice Questions)

Q.1

Note: Attempt **ALL** questions from Section 'A'. Each question carries **ONE** mark.

1. Book Al-Manazir was written by _____.
   A) Ibn-ul-Haitham B) Bu-Ali-Sina C) Al-Beruni D) Jabir Bin Hayyan
2. Muslim scientist Al-beruni calculated the radius and circumference of the _____.
   A) Mars B) Moon C) Earth D) Sun
3. The change of one type of matter into another type is a _____ property.
   A) Magnetic B) Chemical C) Physical D) Neutral
4. RBCs, WBCs and Plasma are the constituents of _____
   A) Blood B) Pus C) Urine D) Tears
5. _____ is a compound.
   A) Air B) Oxygen C) Soil D) Sugar
6. _____ is an example of a chemical change.
   A) Breaking of glass B) Melting of wax C) Burning of paper D) Freezing of water
7. An example of junk food is _____.
   A) Lemon water B) Dry fruit C) Fresh juice D) Biscuit
8. AIDS stands for _____
   A) Acquired Internal Deficiency Syndrome B) Acquired Inter Deficiency Syndrome
   C) Acquired Immunodeficiency Syndrome D) Acquired Inner deficiency Syndrome
9. Tuberculosis is a _____ disease.
   A) Fungal B) Non-biological C) Bacterial D) Viral

10. _____ is an example of viral disease.
    A) Q fever B) Polio C) Whooping Cough D) Candidiasis
11. Fossil fuels contain _____.
    A) Carbon & Hydrogen B) Hydrogen & Oxygen C) Sodium & Calcium D) Carbon & Potassium
12. _____and biomass are conventional sources of energy.
    A) Glass B) Plastic C) Fog D) Coal
13. _____ energy is released in fission and fusion reactions.
    A) Thermal B) Hydroelectric C) Nuclear D) Gravitational
14. A common cause of _____ Pollution is the use of water as a coolant by power plants and industrial manufactures.
    A) Plastic B) Air C) Noise D) Thermal
15. _____ is a process by which a person becomes protected against a disease.
    A) Immunization B) Perspiration C) Rehabilitation D) Neutralization

END OF SECTION 'A'

SECTIONS B & C

Time: 2 hours 35 minutes **Total Marks: 60**

SECTION 'B' **Total Marks: 30**

(Short Answer Questions)

Note: Attempt any **SIX** questions from Section 'B'. Each question carries **FIVE** marks.

Q.2 Describe the impact of science on quality of life.

Q.3 Distinguish between physical and chemical properties of the compound with examples.

Q.4 Identify the chemical composition of table salt and washing powder.

Q.5 Explain the importance of cleanliness for our health.

Q.6 Describe the first aid for a dog bite.

Q.7 State the risk factors of Stroke.

Q.8 Describe the functions of blood.

Q.9 Write names of any five compounds.

Q.10 List conventional and non-conventional energy sources.

Q.11 Describe the chemical compositions of glass and table salt.

END OF SECTION 'B'

SECTION 'C'

Total Marks: 30

(Detailed Answer Questions)

Note: Attempt any **THREE** questions from Section 'C'. Each question carries **TEN** marks.

Q. 12 Describe the causes and effects of hemophilia.

Q.13 State the symptoms and prevention of malaria.

Q.14 Explain the terms: Noise pollution and Nuclear Pollution.

Q.15 Suggest remedial measures to overcome pollution related to the use of energy.

Q.16 What chemical changes take place in rust of iron.

END OF PAPER